

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-19. (Cancelled)

Claim 20. (Previously Presented) A control apparatus for a vehicle having obstruction detection means including radar apparatus for measuring a headway distance to an obstruction existing ahead of said vehicle, and performing a plurality of operation support functions by controlling at least throttle, brakes and a transmission of said vehicle according to the headway distance to the obstruction, said apparatus comprising:

means for detecting a detection performance level of said obstruction detection means; and

means for individually enabling or interrupting operation of said plurality of operation support functions in accordance with said detection performance level.

Claim 21. (Currently Amended) A control apparatus for a vehicle according to Claim 20, further comprising means for notifying ~~[[at]]~~ a driver regarding a state of an operation or stop of said plurality of operation support functions to a driver.

Claim 22. (Currently Amended) A control apparatus according to Claim 20, further comprising means for classifying detection performance of said obstruction detection means into one of at least three ~~or more~~ different levels.

Claim 23. (Currently Amended) A control apparatus according to Claim 22, wherein:

said plurality of operation support functions includes at least an alarm control; ~~[[,]]~~ and

said alarm control is enabled even though the detected detection performance level of said obstruction detection means is ~~[[the]]~~ classified into a lowest level among said at least three ~~or more~~ different levels.

Claim 24. (Currently Amended) A control apparatus according to Claim 20, wherein the following are determined:

[[each]] a limit value of detection performance level required for each of said plurality of operation support functions; ~~is determined~~, and

[[the]] an operation support function having [[the]] a limit value higher than the detected detection performance level of said obstruction detection means.

Claim 25. (Currently Amended) A control apparatus according to Claim 24, wherein:

said operation support functions includes an adaptive cruise control and an alarm control; and [[,]]

the limit value of detection performance level required for the adaptive cruise control is higher than the limit value of detection performance level required for said alarm control.

Claim 26. (Currently Amended) A control apparatus according to Claim 20, wherein:

said control apparatus further ~~comprising~~ comprises means for notifying a driver of information concerning a relation [[of]] between said vehicle

and said obstruction ~~to a driver~~ on the basis of the measured headway distance;
and
~~, wherein~~

a method of notifying the driver of said information is changed
according to the detected detection performance level.

Claim 27. (Currently Amended) A control apparatus according to Claim
20, wherein said means for detecting a detection performance level of said
obstruction detection means; [[,]]

sets [[as]] an initial value for a selected distance which is one of i) a
distance at which an obstruction approaching said vehicle begins to be detected,
~~and/or~~ and ii) a distance at which an obstruction receding from said vehicle
begins to be missed when said obstruction detection means is normal; [[,]]

calculates a current value of the selected distance; ~~at which said~~
~~obstruction approaching said vehicle begins to be detected and/or said distance at~~
~~which said obstruction receding from said vehicle begins to be missed, and~~

compares said initial value with said current value to thereby judge
detection performance level of said obstruction detection means.

Serial No. 10/739,223
Amendment Dated: February 2, 2006
Reply to Office Action Mailed: November 2, 2005
Attorney Docket No. 056203.50959C1

Claim 28. (Previously Presented) A control apparatus according to Claim 20, wherein said obstruction detection means is a millimeter-wave radar.